### ADVANCED CONVERSION TECHNOLOGY POWER Solutions that Perform & Protect

# DC-DC MIL-COTS PRODUCT # SW2511005-32

12–36 VDC Input Voltage 32 VDC Output Voltage

500 W Output Power **1** # of Outputs



# **PRODUCT DESCRIPTION**

This DC-DC power supply is designed to perform and protect in harsh, military environments. It is environmentally sealed to meet IP67 when mated with connectors and cable assemblies. It is compact in size, weighing approximately 4.5 lb, and is base plate or natural convection cooled. It is designed to meet the input power requirements of MIL-STD-1275E. This power supply was built for performance and tested for reliability. Custom output voltages are available.

## **ENVIRONMENT**

Designed to meet MIL-STD-810

### TEMPERATURE

-40°C to +71°C operating, -40°C to +85°C non-operating

## 

Up to 100% condensing with sealed mating connectors and cable assemblies attached



### VIBRATION

Designed to meet NAVMAT P-9492



### SHOCK

Designed to meet MIL-STD-202, Method 213, Test Condition J

### ( EMI

Designed to meet MIL-STD-461G, CE102

### **FEATURES**

- Single output of 32 V up to 500 W
- 12-36 VDC input
- Designed to meet MIL-STD-1275E
- Efficiency up to 96%
- Output current maximum of 15.6 A
- Ripple ≤ 240 mVp-p
- Regulation 5%, line and load
- Non-isolated
- See derating details on page 3



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#### Power Solutions that Perform & Protect CONVERSION **TECHNOLOGY**

# **DC-DC** MIL-COTS **PRODUCT # SW2511005-32**

## MECHANICAL INFORMATION

9.55" (L) x 5.60" (W) x 1.625" (H) Max

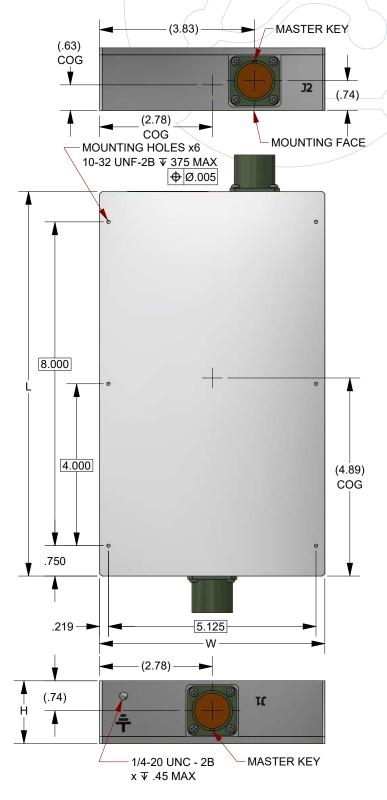
ADVANCED

- Approx. 4.5 lb
- Clear Iridite, Chemically filmed in accordance with MIL-DTL-5541, Type 2, Class 1A
- Environmentally sealed to meet IP67 when mated with connectors and cable assemblies
- Alternative connector finishes may be available—contact us to learn more

# CONNECTORS

<b>J1 Input:</b> D38999/20WD18PN						
PIN	DESCRIPTION					
Α	OPEN					
В	- V <sub>IN</sub>					
С	- V <sub>IN</sub>					
D	- V <sub>IN</sub>					
E	OPEN					
F	OPEN					
G	OPEN					
н	+ V <sub>IN</sub>					
J	+ V <sub>IN</sub>					
К	+ V <sub>IN</sub>					
L	OPEN					
м	+ V <sub>IN</sub>					
N	- V <sub>IN</sub>					
Р	- V <sub>IN</sub>					
R	- V <sub>IN</sub>					
S	+ V <sub>IN</sub>					
Т	+ V <sub>IN</sub>					
U	OPEN					
Suggested Mate: D38999/26WD18SN						

J2 Output: D38999/20WD5SN					
PIN	DESCRIPTION				
А	+ V <sub>OUT</sub>				
В	+ V <sub>OUT</sub>				
С	- V <sub>OUT</sub>				
D	- V <sub>OUT</sub>				
E	OPEN				
Suggested Mate: D38999/26WD5PN					





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# **DC-DC** MIL-COTS **PRODUCT # SW2511005-32**

ADVANCED

## **VOLTAGE & OUTPUT POWER DERATING**

500 W output power can be achieved for 1 second with 12 VDC input voltage and 30 seconds with 16 VDC input volt

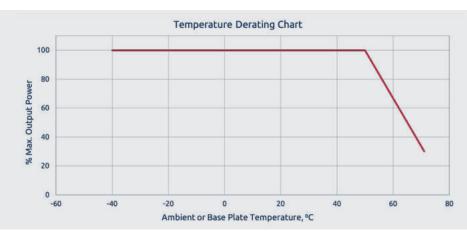
CONDUCTION (BASE PLATE) COOLED					
V <sub>IN</sub> (VDC)	V <sub>OUT</sub> (VDC)	MAX OUTPUT POWER (W)			
12 to 15	32	285			
16 to 19	32	390			
20 to 36	32	500			

CONVECTION COOLED						
V <sub>IN</sub> (VDC)	V <sub>OUT</sub> (VDC)	MAX OUTPUT POWER (W)				
12 to 15	32	210				
16 to 19	32 300					
20 to 30	32	400				
31to 36	32	500				

### DERATING

### **NOTES**

Output performance is derated linearly from 0% at 50°C to 30% at 71°C



# COOLING

Natural convection cooled or base plate cooled. See "Derating Chart" above for additional information.

## **ISOLATION & PROTECTIONS**

### ISOLATION

- Non-isolated input/output
- Isolated input/chassis and output/chassis

### PROTECTION

Reverse polarity, overtemperature, short circuit, and overvoltage with auto recovery

### CONTACT US

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### **MAKE IT A MOTS**

The right power solution helps keep equipment functioning properly in the field. MOTS, or Modified Off-The-Shelf, power supplies are adapted, ruggedized, and designed to meet the unique demands of your application.

The fast, budget-friendly answer for meeting your environmental requirements —ask us about making this power supply a MOTS.

### SW2511005 SERIES SELECTOR GUIDE

ACT Product #	V <sub>IN</sub> (VDC)	# of Outputs	Vout (VDC)	Output Power (W)	Heatsink
SW2511005-12	12 to 36	1	12	240	Ν
SW2511005-15	12 to 36	1	15	300	Ν
SW2511005-16	12 to 36	1	16	320	Ν
SW2511005-18	12 to 36	1	18	360	Ν
SW2511005-22	12 to 36	1	22	440	N
SW2511005-24	12 to 36	1	24	500	Ν
SW2511005-26	12 to 36	1	26	500	Ν
SW2511005-28	12 to 36	1	28	500	Ν
SW2511005-32	12 to 36	1	32	500	Ν

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